

**UNIDIRECTIONAL MESSAGE MASKING AND VALIDATION
SYSTEM AND METHOD**

ABSTRACT

5 A system for secure communication. A random value generator is configured to generate a random value. A message validation code generator is coupled to the random value generator and configured to generate a message validation code based on a predetermined key, a message, and
10 the random value. A one-time pad generator is coupled to the random number generator and configured to generate a one-time pad based on the random value and the predetermined key. And a masked message generator is coupled to the one-time pad generator and configured to generate a masked
15 message based on the one-time pad and the message. In a particular aspect, a protected message envelope generator is coupled to the random value generator, the message validation code generator, and the masked message generator, and is configured to generate a protected message envelope
20 based on the random value, the message validation code, and the masked message. In another aspect, a protected message envelope reader is configured to receive a protected message envelope and generate a random value, a masked message, and a first message validation code based on the received
25 protected message envelope. A one-time pad generator is coupled to the protected message envelope reader and is configured to generate a one-time pad based on the random value and a predetermined key. A message unmasker is coupled to the one-time pad generator and protected message
30 envelope reader, and is configured to generate an unmasked message based on the one-time pad and the masked message.